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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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Bruce L. Horn

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EXAMINER

MYINT, DENNIS Y

ART UNIT

PAPER NUMBER

2162

DATE MAILED: 09/27/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/621,689	Applicant(s) HORN, BRUCE L.	
	Examiner Dennis Myint	Art Unit 2162	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 13 September 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 16 July 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This communication is responsive to Applicant's Amendment, filed on September 13, 2006.
2. Claims 1-20 are pending in this application. Claims 1 and 11 are independent claims. In the Amendment filed on September 13, 2006, claim 1, 3, 8, 10-11, 13-18, and 20 were amended. Claims 21-30 are newly added. This office action is made final.

Response to Arguments

3. Applicant's arguments filed on 21 August 2006 have been considered but are not persuasive.

Based on the amendment, Applicant's argued that *it should be noted that the Office Action acknowledges that the collection based key-phrase hyperlinking and maintaining dynamic collection features of original claims 2 and 12, sub-part i) and iv), respectively, are not shown in the art. These features have been imported into main claims 1 and 11, respectively. Accordingly, those claims should now be allowable* (Applicant's argument, Page 13). In response, new ground(s) of rejection is introduced.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claim 1, 3-7, 9-17, and 19-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Watkins et al., (hereinafter "Watkins") (U.S. Patent Number 6457017) in view of Lewak et al., (hereinafter "Lewak") (U.S. Patent Number 5544360).

Referring to claim 1, Watkins et al. teaches a computer data processing system including a central processing unit configured with an integrated computer control software system for the management of information data objects including automatic organization, indexing and viewing of information, said data processing system (Watkins, Column 1 Line 35 through Column Line 7) and teaches the limitations:

a) "a computer-readable memory structured with a partitioned storage organization having at least one object store object-oriented database" (Watkins, Figure 7: ODBC 62; Column 7 Line 65 through Column 8 Line 9, i.e., *A preferred object model of the system allows the document management objects (i.e., their container derivatives) to remain persistent; and Column 8 Line 48-61, i.e., Container objects 74 are created as an instantiation of attributes (names, date created, type) and relationships (parent, child)) "including at least one of B-Tree nodes" (Watkins teaches that said object store database is a tree, Column 7 Lines 15-20), "foundation objects"*

(Watkins, Figure 7: *Central Object 70* and Column 7 Line 39-59, i.e., *A container 74 is the base class for all objects of the system*) "and reference objects" (Watkins, Column 7 Line 52-55, i.e., *Object Linking and Embedding (OLE) objects*), "and at least one catalog database containing metadata" (Watkins, Figure 7: *ODBC 62*; Column 7 Line 65 through Column 8 Line 9 and Column 8 Line 48-61, i.e., *all the attribute and metadata information are stored in the ODBC database*);

b) "a computer display connected to said memory for displaying objects from said object-oriented database in a desktop-style interface" (Watkins et al., Figure 7: *User Interface 68* and Column 11 Line 56 through Column 12 Line 19);

c) "a computer-user interface device for inputting information to said data processing system, including information to specify objects or properties of objects, and for input of objects from external sources" (Watkins, Column 14 Line 20-38 and Column 3 Line 14-26);

d) "an applications program having component architecture code processed by said central processing unit so as to scan source data of objects" (Watkins Column 3 Line 44-67, i.e., *that is checked every 45 minutes for changes and updates*), "create or extract metadata from said scanned objects" (Watkins, Column 8 Line 48-61, i.e., *which are queried with objects with certain metadata for relationships*), "store said metadata in said catalog database" (Watkins et al., Figure 7: *ODBC 62*, Column 7 Line 65 through Column 8 Line 9 and Column 8 Line 48-61, , i.e., *all the attribute and metadata information are stored in the ODBC database*), "and store reference objects in said object store with metadata links attached to said reference objects to provide automatic

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organization, indexing and viewing of information objects in said desktop-style interface” (Watkins, Column 8 Lines 58-61 and Column 9 Line 22-34).

Watkins does not explicitly teach the limitation:

“storing only one instance of said reference object “; and

(e) “said component architecture code providing automatic organization, indexing and view of said information object includes at least one of :

vi) automatic generation of collections by one or more object content attributes selected by the user from among user-defined categorization(s), user or system-defined metadata query specification(s), user or system-defined key phrase matching, and combinations thereof” (Lewak et al. Column Line 50-54 and Column 8 Line 6-15);

Lewak teaches the limitations:

“storing only one instance of said reference object “ (Lewak et al., Column 4 Line 58-67, i.e., *to store user-defined categories and information linking such categories to specific files*); and

“automatic generation of collections by one or more object content attributes selected by the user from among user-defined categorization(s), user or system-defined metadata query specification(s), user or system-defined key phrase matching, and combinations thereof” (Lewak Column 7 Line 50-54 and Column 8 Line 6-15, i.e., *In the preferred embodiment, when the FC Manager is **running as a background process**, each file being closed is submitted to conditional categorization*);

Lewak is directed to a method and system for accessing computer files and data, using linked categories assigned to each data file wherein reference objects (Column 6 17-22, i.e., *file location in File Information Directory*) with metadata links (Column 5 Line 4-31) attached to said reference objects to provide automatic organization, indexing and viewing of information objects from multiple sources in said desktop-style interface while storing only one instance of said reference object (Column 4 Line 58-67).

At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to combine the feature of, indexing and viewing of information objects from multiple sources while storing only one instance of said reference object as taught by Lewak with the system and method taught by Watkins so that, in the combined system and method, reference objects will be stored an object store with metadata links attached to said reference objects to provide automatic organization, indexing and viewing of information objects from multiple sources while storing only one instance of said reference object. One would have been motivated to do so in order to *provide a method for accessing files which provides intuitive access by user-defined topic*", which provides *easy access to a large number of files and to files having overlapping categories* (Lewak, Column 3 Line 46-56).

As per claim 2, Lewak teaches the limitations:

iii) "refining of views, by automatically conjoining specifications of multiple chosen collections" (Column 9 Line 56 through Column 10 Line 9);

x) "real-time filtering/sorting" (Column 8 Line 16-30, i.e., *displayed alphabetically*);

xi) "notification to the user of collection establishment and changes in collections" (Column 7 Line 49-67, Column 8 Line 6-15, i.e., *notify the user*).

xii) "link creation between objects and collections by drag-and-drop attribution, including the use of collections to add key phrases to an object by dragging into a collection" (Lewak et al., Column 8 Line 61-67, Column 11 Line 3-8, and Column 15 Line 22-36); and

Referring to claim 3, Lewak teaches the limitations:

"wherein the central processing unit processes so as to generate and store in said catalog database, metadata selected from association metadata" (*File Category Table Structure, Category Description* in Column 5 Line 3-31 and *Array of Identifiers of the associated Categories* in Column 6 Lines 24-33) "and link metadata" (*file location* in File Information Directory in Column 6 Lines 17-22), "said metadata permitting storage of only one reference object and linking it to one or more collection groups" (Lewak et al., Column 4 Line 58-67) .

Referring to claim 4, Watkins in view of Lewak teaches the limitations:

"wherein said central processing unit processes so as to include in said metadata a UID" (Watkins, *Object D* in Column 8 Line 62 through Column 9 Line 19) "and a UUID" (Watkins, *an Object ID as well as version number* in Column 9 Line 64 to Column 10 Line 5) "and to alias said UID and UUID to collections selected" (Lewak, Column 6 Line

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44-60), "set or created by the user to create retrieval links from the relevant collections to the reference object so that only one instance of said reference object is stored in said object oriented database, thereby saving data storage capacity" (Lewak, Column 5 Line 4-31) .

Referring 5, Watkins in view of Lewak teaches the limitations:

"wherein said central processing unit processes so as to scan an incoming object's source data" (Watkins, Column 3 Line 44-53), "and upon recognition of individual objects as contained in said source data, create reference objects" (Watkins, Column 8 Line 48-61) "tagged with UUIDs to provide a one-to-one mapping between external data and said reference objects" (Watkins, *an Object ID was well as version number* in Column 9 Line 64 to Column 10 Line 5), "and to automatically classify" (Lewak, Column 7 Line 50 through Column 8 Line 16) "and place representative icons of objects into multiple collections or containers" (*Hybrid Folders* in Column 2 Line 40-47 and Column 4 Line 58 through Column 5 Line 2) "using said link metadata rather than duplication of said objects, thereby allowing users to categorize objects in ways that most clearly reflect different approaches and ways of viewing the same information, and to apply a user's categorizations in an inverse manner to show relationships between objects and filter out those that are not relevant to the current view for user viewing by reference" (Lewak et al, Column 8 Line 16-30).

Referring to claim 6, Lewak teaches the limitations:

"wherein said central processing unit processes so as to place only link metadata" (*file location* in File Information Directory, in Column 6 17-22) "in said catalog for ease of organization and cross-referencing of objects among a large group of collections and containers by clicking on the icon representing an object in one collection window and dragging it into another collection window to establish a new link and new link metadata entry in said catalog database so that said reference object is viewable, accessible and retrievable from both collections" (Column 8 Line 61-67, Column 11 Line 3-8, and Column 15 Line 22-36) .

Referring to claim 7, Watkins in view of Lewak teaches the limitations:

"wherein said central processing unit processes so as to query said metadata, including queries selected from matching key phrases in an object's text, matching dates and time ranges or exact matches, matches of sizes, ordering or type" (Lewak, Column 10 Line 19 through Column 11 Line 2), "and to create dynamic links based on matches detected" (Lewak, Column 11 Lines 3-16), "including automatic query processing of incoming external and internally created objects for dynamic updating of all relevant collections so that any changes in the user's information space or desktop results in timely and appropriate changes to affected object views and for hypertext generation highlighting and linking in textual properties of objects, including objects selected from e-mail text and document text" (Watkins, Column 3 Lines 44-53 and Lewak, Column 8 Line 6-15).

Referring to claim 9, Lewak teaches the limitations:

"wherein said central processing unit processes so as to provide to users a basic set of organization principles for users to intuitively manage their information so as to reflect the information's relationships as they occur and change in the real world, including relationship principles based on people, projects, activities, events, time and place" (Column 16 Line 11-27 and Column 2 Line 39-53).

Claim 10 is rejected on the same basis as claim 9.

Claim 11 is rejected on the same basis as claim 1.

As per claim 13, Lewak teaches the limitations:

"wherein said central processing unit processes so as to specifically include objects in, or exclude objects from, a collection, while simultaneously performing automatic collection of objects using meta- data criteria, thereby allowing the user to specify objects for a collection via criteria and specifically exclude objects that, despite matching the criteria, should be excluded from the collection; and to include items that, despite not matching the criteria, should be included in the collection" (Lewak, Column 7 Line 50-54 and Column 8 Line 6-15, i.e., *In the preferred embodiment, when the FC Manager is running as a background process, each file being closed is submitted to conditional categorization*).

As per claim 14, Watkins teaches the limitations:

"wherein said central processing unit processes, upon an object becoming a member of a container, so that a property of the object is modified based on the inclusion of the object in the container, or, conversely, a property of the container is modified based on the inclusion of the object in the container" (Watkins, Column 8 Lines 58-61, i.e., **object repository** (i.e., a container) and *The layer of ODBC objects 65 with containers 74 on top of the relational database 62 turn the database 62 into an object repository. Each object in the system gets its attribute values (metadata) from a single row in a database table* and Column 9 Line 22-34, i.e., *The metadata for all classes is stored as strings in two database tables – one for current objects and one for old versions. At run-time, the string values are mapped or converted to their display type*).

As per claim 15, Watkins teaches the limitation:

"wherein said central processing unit processes so as to create metadata representing dependent properties as a function of other object metadata, or object content data" (Watkins, Column 8 Lines 62 through Column 9 Line 5, i.e., *These custom attributes are stored as raw data in the database and converted to the specific type at the run-time by the system. This allows data definition altering and data modification without altering database structure*).

As per claim 16, Watkins teaches the limitation:

"wherein said central processing unit processes so as to automatically maintain consistency of collection contents based on notification of changes in object metadata, so that the collection content is updated to reflect the object metadata changes" (Column 9 Lines 10-18, i.e., *When a container 74 makes itself persistent, it needs to store its relationship data and its metadata in a permanent storage, such as a file. The container 74 also needs to keep track of its relationships and metadata information in memory as long as it is instantiated*).

As per claim 17, Watkins teaches the limitation:

"wherein said central processing unit processes so as to recognize when a collection's object set changes, and to cause a process to be run based on that event" (Column 9 Lines 10-18).

Claim 19 is rejected on the same basis as claim 2.

Claim 20 is rejected on the same basis as claim 13.

5. Claim 8 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Watkins in view of Lewak and further in view of Rochford et al., (hereinafter "Rochford" (U.S. Patent Number 6691282).

Watkins in view of Lewak does not explicitly teach the limitation:

"wherein said processing unit processes so as to provide, during user scrolling, views of objects and their containment relationships or location paths within said memory in a window on the display so the visible object's containment hierarchies are continuously made visible in a dynamically-updating portion of the window, and as the scrolling continues in descending hierarchical order, the container of each branch remains visible in, or sticks-to, a dynamically-updating portion of the window, and in ascending hierarchical order, the stuck container views are deleted."

Rochford teaches the limitations:

"wherein said processing unit processes so as to provide, during user scrolling, views of objects and their containment relationships or location paths within said memory in a window on the display so the visible object's containment hierarchies are continuously made visible in a dynamically-updating portion of the window, and as the scrolling continues in descending hierarchical order, the container of each branch remains visible in, or sticks-to, a dynamically-updating portion of the window, and in ascending hierarchical order, the stuck container views are deleted" (Figures, particularly Figure 6, and Column 2 Line 62-64; and Column 3 Line 66 through Column 4 Line 67 and Column 6 Line 48-55).

Rochford et al. teaches a system and method for displaying and navigating containment hierarchies, wherein during user scrolling (Figures, particularly Figure 6, and Column 2 Line 62-64), views of objects and their containment relationships or location paths within said memory in a window on the display so the visible object's containment hierarchies are continuously made visible in a dynamically-updating portion

of the window, and as the scrolling continues in descending hierarchical order, the container of each branch remains visible in, or sticks-to, a dynamically-updating portion of the window, and in ascending hierarchical order, the stuck container views are deleted (Column 3 Line 66 through Column 4 Line 67 and Column 6 Line 48-55).

At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to add the feature of containment hierarchy displaying as taught by Rochford et al. to the system and method taught by Watkins et al. in view of McCotter et al and further in view of Lewak et al. so, in the resultant system and method, the container of each branch of the hierarchy would remain visible in, or sticks-to, a dynamically-updating portion of the window. One would have been motivated to do so in order to *be able to navigate through a file folder containment hierarchy in a manner, which allows the context of what is being observed to be continuously clear* (Rochford et al., Column 2 Line 8-11).

Claim 18 is rejected on the same basis as claim 8.

Conclusion

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure as follows.

U.S. Patent Number 5425139 (Williams et al.)

U.S. Patent Application Publication Number 2003/0088593 (Strickler)

10. Applicant's arguments have been considered but are not persuasive.

Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not

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mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Contact Information


11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dennis Myint whose telephone number is (571) 272-5629. The examiner can normally be reached on 8:30 AM - 5:30 PM Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Breene can be reached on (571) 272-4107. The fax phone number for the organization where this application or proceeding is assigned is 571-273-5629.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Dennis Myint

AU-2162


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